
NEVADA TRASH TALK

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Trash Talk is the quarterly newsletter of the Solid Waste Branch of the Nevada Division of Environmental Protection (NDEP). *Trash Talk* reports on the progress of State regulatory efforts and shares some of the latest ideas in solid waste management.

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COMPOSTING HEATS UP IN NEVADA

The number of compost plants in Nevada is growing as local governments, farmers and entrepreneurs see opportunities to reduce the costs of waste disposal while producing marketable soil amendments from organic waste materials. The NDEP has recently identified five legitimate facilities either operating or in startup mode. Unfortunately, a few others have been identified which are not so legitimate --- although they diverted waste materials from permitted disposal sites, they have failed to produce marketable products in significant quantities and allowed waste to pile up indefinitely on site. Environmental regulators, including NDEP and the Clark County Health District, have found such sites to be in violation of state solid waste management regulations . . . and liable for cleanups and civil penalties. What, then, is legitimate composting, and how is it described in Nevada solid waste regulations?

Nevada regulations use a commonly accepted definition of composting: "... *a controlled process of biological degradation of solid waste to an inoffensive humus-like product.*" The regulations say further that compost must not contain pathogenic organisms, reheat upon standing, or contain sharp particles. The compost must also be innocuous. A few general requirements concerning compost plant location and operation, as well as prior approval by the solid waste management authority, are also contained in Nevada Administrative Code. These standards, while not very precise, indicate that compost should not be a hazard to human health or the environment and should not be subject to spontaneous combustion.

Finished compost must also be marketable. Although this is not directly addressed in the regulations, stringent standards and permitting requirements apply to solid waste disposal sites, and any facility which accepts waste materials but fails to remove them in a timely manner becomes a de facto disposal site. In order to create a viable business and remain in compliance with solid waste regulations, prospective composters should have a clear plan before any waste is brought to the site. Things to consider before opening a compost plant are given in the article on page 2.

The NDEP believes that revisions to the existing regulations are necessary in order to clarify composting standards and promote the sound and productive management of organic waste materials. We hope to begin this effort in 2001 by holding public workshops with interested stakeholders. Persons wishing to participate in such workshops should call Les Gould at (775) 687-4670, ext. 3018 to request workshop notification. Future articles in this newsletter will provide updates on the status of composting, and composting regulation development, in Nevada.

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Considerations for Composters

As an agency charged with regulation of compost plants, the NDEP has observed a range of facilities and offers

these notes to persons interested in commercial or community composting.

Feedstocks - Yard debris, manure, and other agricultural waste are common, and relatively innocuous, feedstocks. Others, including sewage sludge, food scraps and mixed municipal or construction wastes, present additional technical regulatory concerns. In general, feedstocks should be source-separated, i.e. separated from the waste stream at the point of generation. Yard debris, for example, should be separated at the curb and be free of contaminants such as plastic film or residential garbage. Once in the feedstock, contaminants are costly to remove and result in decreased product value and marketability.

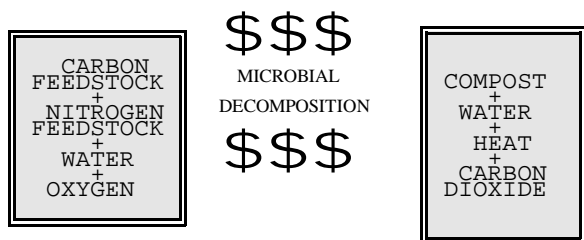
Availability of feedstocks is a critical concern.

What quantities are needed to meet production goals? Are contracts needed to ensure a continued flow of organic materials to the compost plant? Do the contracts provide a mechanism for reducing or stopping feedstock acceptance if production & marketing targets can't be met?

Products & Markets - Residential and commercial landscaping is a potentially high-end market. For such use compost must be of good quality - a mature, humus-like product, not too coarse and with no visible contaminants. And buyers may want certification as to what cannot be detected with the unaided senses. . . pH, salinity, nutrient content, trace elements, etc. All the above characteristics, and many others, help to determine both the price and the appropriate uses of compost. Other markets for compost include nurseries, agriculture, land reclamation and erosion-control projects.

A good composting business plan will target specific markets and uses. How much of a given product can the local markets absorb? What will be the product specifications? How will they be advertised?

THE BASIC COMPOSTING PROCESS



Mulch or Compost? - Compost plants can, and sometimes do, produce both, but it's important to recognize that they are distinct products having different uses. Whereas compost is used to improve the soil, wood mulches are simply chipped to the desired size and applied as top-dressings to inhibit weed growth, retain soil moisture and prevent erosion.

Method of Operation - Assuming feedstocks are available and the markets are there, what is the most efficient means of turning the former into products for the latter? What equipment, how much space, how much time will be

required?

Location - The compost plant must be located close to the source of the feedstocks as well as to its markets. Excessive trucking costs on either end may devour an already slim profit margin. At the same time, the plant must meet regulatory buffer zone standards and be compatible with surrounding land uses. It is often said that the biggest obstacle to a compost plant's starting and staying in operation is odor. Strong and unpleasant odors are rarely tolerated by neighbors in residential or commercial areas. If your plant is close to these, make sure that odor control is squarely addressed in your operating plan.

Additional information is available from the following sources:

- C The US Composting Council, 1-440-989-2748
www.compostingcouncil.org
- C BioCycle Magazine, 1-610-967-4135
www.jgpress.com
- C US EPA Region 9, 1-415-744-2134
www.epa.gov/compost

* * *

NDEP Modifies Proposed Recycling Regs

As noted in the last issue of *Trash Talk*, the NDEP is proposing two new regulations concerning recycling programs for public buildings and paper recycling by state government offices. The NDEP has revised the proposed regulations to address comments heard at the public workshops held in Carson City and Las Vegas. The NDEP petition to adopt the regulations is scheduled to be heard at the State Environmental Commission hearing in Reno on February 15 & 16, 2001. For more information and to view the revised proposed regulations, visit the SEC website at: www.state.nv.us/ndep/admin/envir01.htm

NDEP Denies Class I Landfill Permit

Crestline Recycling and Disposal, Inc., which owns and operates the Crestline Class II landfill in Lincoln County near Panaca, was recently denied its application to expand the facility to a Class I site. (A Class I site may accept more than 20 tons per day of municipal waste.) During the period for public comment on the permit, extensive technical comments were received from Republic Services of Southern Nevada. Following reexamination of the application the NDEP denied the permit based on technical grounds, including deficiencies in the drainage control design and the seismic stability analyses for containment structures. Crestline, which intends to resubmit the application as soon as possible, has indicated the site would be used as a merchant facility to import waste from out of state.

COMMUNITY PROFILE-Lincoln Co

Prior to implementation of the new landfill regulations on

October 9, 1997, Lincoln County didn't have to think much about its trash. Residential collection service was available in some communities, and open dumps prevailed. The public waste bin collection system has been weak, but the dumps are closed, and the permitted Class II landfill at Crestline represents a big improvement over previous disposal practices. On the other hand, some speculative waste disposal projects have come to the county enticing community leaders and citizens with promises of jobs and revenue for the county. So far they have brought only uncertainty-and more waste.

Lincoln County's population of about 4500 is spread over a large area, though concentrated in the 4 principal communities of Caliente, Pioche, Panaca and Alamo. The economy is based on agriculture and support services, and government accounts for about 40% of employment. There is currently no significant mining or other industry. Public resources are spread thin, and finding funds to manage solid waste is not easy. The county's solid waste system is operated under a franchise to Crestline Recycling & Disposal, Inc. The contract is funded by an annual county assessment fee of \$120 per parcel - an amount consistent with other counties having similar funding mechanisms.

Crestline, Inc. provides commercial collection service and collection at the 10 public waste bin facilities. The bin sites are not covered, but they do have elevated ramps for easy dumping and cyclone fencing on 3 sides for litter control. Crestline uses a front-loading compactor to empty up to ten 8-cu.yard dumpsters at each site. In addition to the dumpsters, the towns of Alamo, Panaca and Pioche were recently provided with 30-yard roll-offs to handle bulky wastes. Crestline acquired a roll-off truck and an extra compactor after a recent equipment breakdown left the county without collection service for several days. This was the low point; service has since improved and stabilized.

As noted in the article on page 2, Crestline, Inc. has applied for a Class I landfill permit. Under the proposed design the landfill could accept up to 4,000 tons/day, about what is generated by a city of 1.5 million. The county has negotiated a contract with Crestline which would provide free disposal to in-county waste, as well as a per-ton host fee, after the average disposal rate reaches 500 tons/day. Some residents are hopeful that a large merchant landfill will solve the county's waste problems and stimulate the local economy. Others fear that it will just bring a new set of problems. Lincoln County has included the proposed new landfill in the current revision of its solid waste management plan, yet the community still does not know where the waste would be imported from or who will end up owning & operating the landfill.

CLARK COUNTY RECYCLING FORUM PLANNED

It appears that the current state of waste management in Nevada leaves much room for improvement - not because it is not safe, but because it is wasteful. We have plenty of landfill space, and the landfills are well designed and operated. But is landfilling the best way to manage our waste? How can we reduce waste and progress towards our 25% recycling goal? To assess the current situation, consider the following table:

Municipal Waste Generation & Recycling Rates

	US ¹	NV ²	CLARK ²
Generation Rate ³	4.5	10.6	10.4
Disposal Rate ³	3.2	9.4	9.6
Recycling Rate	28%	11%	8%

1-1997 data, US EPA

2-1999 data, NDEP

3-pounds per person per day

The data indicate that Nevada not only generates much more municipal waste than the national average, but that we recycle less. The result is that we discard approximately 3 times more per person than the national average.

To address this problem the NDEP will focus efforts on Clark County. Potential improvement is greatest here. Clark's recycling rate is low, it has nearly 70% of the state's population, and it is growing rapidly. Further, the solid waste management plan adopted by the Clark County Health District in 1995 already made several recommendations to improve recycling. During its current 5-year revision of this plan, however, the Health District has recognized that virtually none of those recommendations were implemented. This appears to be due to the fact that the Health District, as the regulatory agency, is not responsible for directly managing waste. That responsibility lies with each City and County and is typically carried out through franchise agreements. (...continued on next page)

State Employees Recycle

We hope to begin an open dialogue with stakeholders that will establish a sound foundation for this issue with factual information and allow an opportunity to explore economic



incentives and other measures that will help achieve a mutual goal. To initiate this effort, the Health District will be hosting a Recycling Forum in March 2001. This forum will bring together panels representing local, State and Federal regulators, municipal government officials, recycling and waste management industry representatives, and interested citizens. Persons interested in participating in this forum may contact David Friedman at NDEP or Glenn Savage at the Health District (383-1274.)

NDEP welcomes comments, news items, and questions regarding solid waste management. Please contact the Solid Waste Branch by dialing 687-4670, and then entering the appropriate extension number as follows:

Les Gould, Supervisor, x3018

Regulatory and Program Development
Annalyn Settlemeyer, x3002

Inspections/enforcement, waste tires.

Dennis LaPrairie, x3167

Permitting, engineering, and technical assistance.

Art Gravenstein, x3054

Technical assistance, special waste management, landfill closures.

Kim Copeland, Recycling Program Asst., x3003

Recycling information and assistance.

David Friedman, Recycling Coordinator, x3008

Recycling information and assistance.

Nevada Recycling Hotline: 1-800-597-5865

Training/Technical Assistance to Five Rural Counties From the NvRWA

The Nevada Rural Water Association is a non-profit organization which receives funding from the US Department of Agriculture. NvRWA provides public education, technical training and on-site assistance to Native American Tribes and rural local governments in wastewater treatment and solid waste management. These services are provided at no cost to the recipients.

Steve Porter is the Executive Director and manager of the Solid Waste Program. He is a solid waste veteran, having been manager of the Boulder City landfill for 5 years and worked in several other locations as refuse collection operations manager. He has been in Nevada with NvRWA since 1996. With input from NDEP solid waste staff, NvRWA targeted five counties for assistance in the current fiscal year (10/1/00 to 9/30/01) program. These are Lander, Elko, Lyon, Nye and Lincoln Counties.

Under the program for the current year, Steve is offering the following training programs in the communities identified above: *Training Sanitary Landfill Operating Personnel* and *Waste Screening at Municipal Solid Waste Management Facilities*. NDEP encourages eligible operators to take advantage of these courses. Participants will receive credit towards certification by the Solid Waste Association of North America (SWANA).

ADDRESS CORRECTION REQUESTED

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